

P1 Panelboards

usa.siemens.com/panelboards



Product Description

The current generation of panelboards from Siemens offers the high level of engineering and innovation you've come to expect from the leader in power distribution technology. The "P Series" line of panelboards offers a stepped approach to power distribution. (P1-P2-P3-P4-P5)

The line is anchored by the innovative P1, featuring the industry's most flexible designs. The P1 series virtually eliminates common errors, such as feed direction, and main lug versus main breaker. Increasing distribution is simplified by the ability to add feed-thru lugs or Subfeed Breakers in the field.

P1 construction includes the following:

- **250A max. bus** in CU or AL tin plated w/18-66 1-pole circuits
- **400A max. bus** in CU or AL tin plated w/30-66 1-pole circuits
- * Interiors with BL/BQD branch unit space are available in both Feed-thru and Non-Feed-thru variations. (FT panel # ends with "T", NFT panel # ends with "N")
- ** Interiors with xGB/3VA41 branch unit space are only available in Feed-thru variations and 3-phase only.
- *** Non-Feed-thru interiors do not include the Sub-Feed Space, but allows for 6" of additional unit space in the same size enclosure.

Standards & Certifications:

- NEC: 2020 (where accepted), NEMA PB 1 and ANSI/NEMA PB1.1
- UL Listed: 67, 50 and 50E. (see "Panelboards" File #E2269, and #E4016) Also meets Federal Specification W-P-115c.
- NFPA 70 compliant (Enclosures are not fire rated).
- Seismically qualified and OSHPD rated (OSP #0078)- see also LVTM-LVSEI-xxxx Seismic Flier

Features Overview

The P1 Series lighting panel features include:

- 1) Fas-Latch trim (Type 1), is standard but, P1 can be ordered with other popular front styles.
- 2) Adjustable Interiors with jacking screw system.
- 3) The split neutral with connections on both sides of the panel.
- 4) Interior is invertible in the field and convertible from Main Breaker to Main Lug (also ML to MB) with field installable kits.
- 5) Feed-Thru panels can add Feed-thru Lugs, subfeed breakers or bus mounted Surge Protection with no box size change.

P1 construction features:

- Either 250A or 400A max. main bus, only Temp Rated Tin plated aluminum bus or tin plated copper bus are available.
- Up to 600 volts AC with standard Bus bracing up to 200KAIC

Main space:

- 250A max. bus allows for any MLO or MB kit up to 250A max. to be installed or changed in the field as needed.
- 400A max. bus allow for any 400A MLO or MB kit to be installed or changed in the field as needed.

Unit space:

- BL/BQD Unit Space Panels only accept BL, BT or BQD frame breakers up to 100A max. (includes AFCI/GFCI series and BSPD surge)
- xGB/3VA41 Unit Space Panels only accept xGB or 3VA41 frame breakers up to 125A max. (Limited to 100A in the 250A 18 Circuit Panel only) (BSPD bolt on SPD also available)

Subfeed space: (available only with Feed-thru interiors)

- a) Feed-Thru Lugs either 250A max or 400A max are available
- b) Subfeed Breakers can be added using any of the 250A max. Main Strap kits for both 250A or 400A Panels.
- c) Surge Protection Devices: Bus Mounted SPD can be added as Factory Assembled or in the field. (TPS3 02/L2 or TPS4 01/L1 series)

Additional information:

For complete application and pricing information contact your local sales office.

For further information on the product, visit our website at www.usa.siemens.com/panelboards.

For detailed configuration information consult the SpeedFax section 11 on the website.

P1 Panelboard additional information

Enclosures available:

- Std. Enclosure sizes: 20" wide x 5.75" Deep
- Std. heights: 26", 32", 38", 44", 50", 56", 62", 68" and 74". Also available B74FLR universal fit Type 1 Enclosure fits all P1/P2 interiors 26" thru 74".
- Std. Types Available: Type 1, Type 3R, Type 3R/12, or Type 4X

Type 1 Fronts — Surface or Flush available:

Order to match box height: Typical 20" wide w/ #14 Gauge Steel

- FasLatch Front (Surface or Flush) is Standard, options available: Screw-to-Box, Hinge-to-Box and Door-in-Door fronts with either standard hinge or Piano Hinge options (including 304 Stainless).

Weight = Approximate 3 lbs. per inch of box height

- Total panelboard weight when filled with a normal quantity of breakers and accessories is an estimate only.

Series Connected Short Circuit Ratings

The term "Series Connected Short Circuit Rating" refers to the application of series connected circuit breakers in a combination that allows some breakers to have lower individual interrupting ratings than the available fault current.

This is permitted as long as the series combination has been tested and certified by UL. See Circuit Breaker Section of the SpeedFax.

- Series rating booklet # PBTA-00101B-1020 (web searchable)

| | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Catalog Numbering System: Factory Assembled → | | | | P | 1 | C | 4 | 2 | M | L | 2 | 5 | 0 | A | T | S | N |
| Type of Panel: | | | | P | 1 | | | | | | | | | | | | |
| Voltage and System Code: | | | | A, C/X, D, E/8 | | | | | | | | | | | | | |
| "X" and "8" are for P1 UPB only interiors | | | | F, J, I, T | | | | | | | | | | | | | |
| (UPB max . circuits = 54) Circuits: | | | | 18, 30, 42, 54, 66 | | | | | | | | | | | | | |
| (See Speedfax for MB Codes) Main: | | | | ML = Main Lug, | | | | | | | | | | | | | |
| MC (Main Convertible for UPB only) | | | | "xx" = Main Breaker | | | | | | | | | | | | | |
| (UPB : only 250A or 400A max.) Amperage: | | | | 100-400A | | | | | | | | | | | | | |
| (only Tin Plated CU or AL Bus) Bus Code: | | | | (material/plating) A or C only | | | | | | | | | | | | | |
| Feed Location: | | | | T = Top B = Bottom | | | | | | | | | | | | | |
| Mounting: | | | | S = Surface F = Flush | | | | | | | | | | | | | |
| Subfeed Space Indicator (RP1 only) | | | | Factory assembled: T or N = No Subfeed Space | | | | | | | | | | | | | |
| UPB Catalog number - only 12 characters → | | | | P | 1 | X | 4 | 2 | M | C | 2 | 5 | 0 | A | T | | N/A |
| Subfeed Space Indicator (for RP1 only) | | | | UPB: always = T = Subfeed Space Included | | | | | | | | | | | | | |

| Voltage codes | |
|---------------|--|
| A | 120/240 1Ø 3 W AC |
| C or X | 208Y/120 3Ø 4 W Wye AC - X is for P1 UPB only |
| D | 240 3Ø 3 W Delta AC |
| 8 | 480Y/277 3Ø 4 W Wye - P1 w/GB/3VA41 Branch Only |
| E | 480Y/277 3Ø 4W Wye AC |
| F | 480 3Ø 3 W Delta AC |
| J | 240 1Ø 2W No Neutral AC |
| I | 347 3Ø 3W Delta AC |
| T | 230 3Ø 3W Delta AC |
| Note: | UPB Interiors available only in codes: A, E, X and 8 |

Branch Circuit Breakers (also see Bolt on SPD series BSPD in this flier # RPFL-BSPD1-0120)

| Revised P1 Branch Circuit Breakers ^① | | | | 1-Pole | | | | | 2-Pole and 3-Pole | | | | | | | | |
|---|----------------------------------|--------------------|---------------------------|----------------|------|------|----------------------|---------------------------------|-------------------|------|-----------|------|-----------|------|--------------------------|----------------------|---------------------------------|
| | | | | Max IR (kA) at | | | | Amp Ratings Available | Max IR (kA) at | | | | | | | | Amp Ratings Available |
| Amp Rating | Trip Type | Breaker Family | Breaker Type | 120V | 277V | 347V | 125V DC ^③ | | 120/240V | 240V | 480Y/277V | 480V | 600Y/347V | 600V | 125/250V DC ^③ | 250V DC ^③ | |
| 100 | Thermal Magnetic | BL | BL, BT ^② | 10 | — | — | — | 15-70 ^② | 10 | 10 | — | — | — | — | — | — | 15-100 ^④ |
| | | | BLH, BTH ^② | 22 | — | — | — | 15-70 ^② | 22 | 22 | — | — | — | — | — | — | 15-100 ^④ |
| | | | HBL | 65 | — | — | — | 15-50 | 65 | 65 | — | — | — | — | — | — | 15-100 |
| | Special ^② Application | BLG BL | BLG ^② | 10 | — | — | — | 15-20 | 10 | - | — | — | — | — | — | — | 30 |
| | | | BL(HID) ^② | 10 | — | — | — | 15-30 | 10 | - | — | — | — | — | — | — | 15-30 |
| | Thermal Magnetic | BQD BQD (CSA) | BQD ^⑤ | 65 | 14 | — | 13 | 15-100 | — | 65 | 14 | — | — | — | 13 | — | 15-100 |
| | | | BQD6 ^⑤ | 65 | — | — | 13 | 15-70 | — | 65 | — | — | 10 | — | 13 | — | 15-70 |
| XX | Electronic and misc. | BL | AFCI/GFCI & Dual Function | X | — | — | — | see special table page SF 11-17 | x | — | — | — | — | — | — | — | see special table page SF 11-17 |
| 125 | Thermal Magnetic | GB ^⑥ | NGB | 100 | 25 | 14 | 13 | 15-125 | — | 100 | 25 | — | 14 | — | 13 | — | 15-125 |
| | | | HGB | 100 | 35 | 14 | 13 | 15-125 | — | 100 | 35 | — | 14 | — | 13 | — | 15-125 |
| | | | LGB | 100 | 65 | 14 | 13 | 15-125 | — | 100 | 65 | — | 14 | — | 13 | — | 15-125 |
| | | 3VA41 ^⑦ | SEAB | 65 | 25 | 14 | 13 | 15-125 | 65 | 65 | 25 | 25 | 14 | — | 53 | 53 | 15-125 |
| | | | MEAB | 85 | 35 | 18 | 23 | 15-125 | 85 | 85 | 35 | 35 | 18 | — | 83 | 83 | 15-125 |
| | | | HEAB | 150 | 65 | 25 | 33 | 15-125 | 150 | 150 | 65 | 65 | 25 | — | 103 | 103 | 15-125 |

- ① Unit space is 1 inch per pole, except for Special Application with accessory included.
 - No branch kits available, unit space for all branch positions is twin mount.
 - Branch space is either for BL/BQD only (or) for xGB/3VA41 only.
 ② BLG: Two-pole breaker is one phase and neutral. Three pole is two phases and neutral
 - See SpeedFax Page 7-31 for additional info. Some are Built to order. Allow 2-3 weeks delivery.
 ③ DC Voltage Systems are not approved for use in P1 panels. Refer to P2/P3 panels if DC Voltage Systems are needed.

- ④ 110A-125A BL/BLH (2-pole only) available as Main or Subfeed only in Revised P1 panels.
 ⑤ Approved for CSA and UL Listed.
 ⑥ Approved for CSA but not UL Listed.
 ⑦ BT and BTH are only available in 15A and 20A with two 1-pole circuits in one inch of unit space.
 ⑧ The Revised P1 (18 circuit 250A only) is limited to 100A per connection (200A per pair) when installing xGB Branch Breakers across from one another. 3VA41 does not have this restriction. All other configurations allow 125A per connection max. (250A per pair max.)

Primary Main Breaker Selections available for P1 Panels

Note: all 250A frame and smaller are suitable for Subfeed single mount

| P1 Main Circuit Breakers & Subfeed | | | | 2-Pole and 3-Pole | | | | | | |
|------------------------------------|-------------------------------------|----------------------|--------------|-------------------|------------|-------|------------|-------|-----------------------|--|
| | | | | Max IR (kA) at ① | | | | | Amp Ratings Available | |
| Amp Rating | Breaker Family | Main Breaker Code | Breaker Type | 240V | 480Y /277V | 480V② | 600Y /347V | 600V③ | | |
| 100 | BL | BL | BL | 10 | — | — | — | — | 15-100 | MBKVA41A for 1-phase MBKVA41B for 3-phase |
| | | BH | BLH | 22 | — | — | — | — | 15-100 | |
| | | HB | HBL | 65 | — | — | — | — | 15-100 | |
| | BQD | BQ | BQD② | 65 | 14 | — | 10 | — | 15-100 | |
| 125 | Sentron GB | NB | NGB | 100 | 25 | — | 14 | — | 15-125 | |
| | | G2 | HGB | 100 | 35 | — | 14 | — | 15-125 | |
| | | G3 | LGB | 100 | 65 | — | 14 | — | 15-125 | |
| | 3VA41 | V1 | SEAB | 65 | — | 25 | 14 | — | 15-125 | |
| | | V2 | MEAB | 85 | — | 35 | 18 | — | 15-125 | |
| | | V3 | HEAB | 100 | — | 65 | 25 | — | 15-125 | |
| 225 | Sentron QR | QR | QR2 | 10 | — | — | — | — | 100-225 | MBKQR1A for 1-ph MBKQR3A for 3-ph |
| | | Q4 | QRH2 | 25 | — | — | — | — | 100-225 | |
| | | Q5 | HQR2 | 65 | — | — | — | — | 100-225 | |
| | | Q6 | HQR2H | 100 | — | — | — | — | 100-225 | |
| 250 [150] | 3VA52 (W/TM230 trip) | VA | MFAS | 85 | — | 35 | — | 18 | 100-250 | MBKVA5262A for 1-phase MBKVA5262B for 3-phase |
| | | VB | HFAS | 100 | — | 65 | — | 25 | 100-250 | |
| | | VC | CFAS | 200 | — | 100 | — | 35 | 100-250 | |
| | 3VA62 [3VA61] (ETU350 LSI standard) | WA [W2] | MFAE [MDAE] | 100 | — | 35 | — | 18 | 100-250 [40-150] | |
| | | WB [W3] | HFAE [HDAE] | 100 | — | 65 | — | 22 | 100-250 [40-150] | |
| | | WC [W4] | CFAE [CDAE] | 200 | — | 100 | — | 35 | 100-250 [40-150] | |
| | | WD [W5] | LFAE [LDAE] | 200 | — | 150 | — | 50 | 100-250 [40-150] | |
| | 400 | 3VA53 (W/TM230 trip) | VE | MJAS | 85 | — | 35 | — | 18 | |
| VF | | | HJAS | 100 | — | 65 | — | 25 | 200-400 | |
| VG | | | CJAS | 200 | — | 100 | — | 35 | 300-400 | |
| 3VA63 (ETU350 LSI standard) | | WE | MJAE | 100 | — | 35 | — | 18 | 100-400 | |
| | | WF | HJAE | 100 | — | 65 | — | 22 | 100-400 | |
| | | WG | CJAE | 200 | — | 100 | — | 35 | 100-400 | |
| | | WH | LJAE | 200 | — | 150 | — | 50 | 100-400 | |

① DC System Voltages are not available for RP1 series.

② Approved for CSA and UL Listed.

③ For Revised P1 Panels only. Not applicable for "original" P1 panels.

④ 480V values apply to 480Y/277V also.

⑤ 600V values apply to 600Y/347V also.

Standard Enclosures

| Box Height (in.) | Catalog Number | | | | |
|---------------------|----------------------|----------------------|--------------------|----------|-------------|
| | Type 1 Standard Trim | | | Type 3R® | Type 3R/12® |
| | Box ^① | Surface ^② | Flush ^② | | |
| 26 | B26 | S26B | F26B | NR26 | WP26 |
| 32 | B32 | S32B | F32B | NR32 | WP32 |
| 38 | B38 | S38B | F38B | NR38 | WP38 |
| 44 | B44 | S44B | F44B | NR44 | WP44 |
| 50 | B50 | S50B | F50B | NR50 | WP50 |
| 56 | B56 | S56B | F56B | NR56 | WP56 |
| 62 | B62 | S62B | F62B | NR62 | WP62 |
| 68 | B68 | S68B | F68B | NR68 | WP68 |
| 74 | B74 | S74B | F74B | NR74 | WP74 |

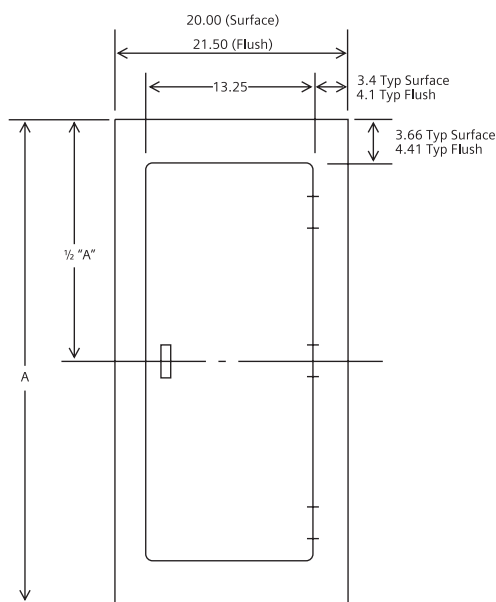
① 14 Gauge Steel only.

② 16 Gauge Can w/ 14 Gauge Front.

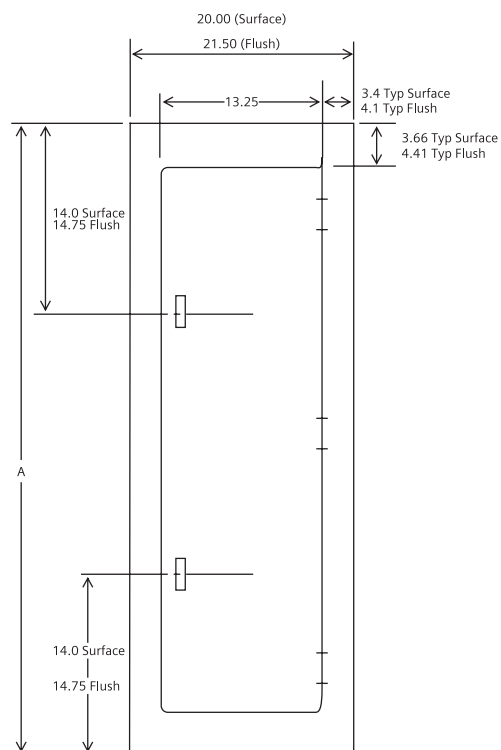
Lug Kits — Main or Feed Thru

| Amp Rating | Mat. | Wire Range (includes Neutral) | Service | Revised P1 Catalog No. ① |
|------------|------|--|---------|-----------------------------|
| 250 | AL | (1) #6 AWG-350 kcmil (CU or AL) | 1 Phase | MLKA1A |
| | | | 3 Phase | MLKA3A |
| | CU | (1) #6 AWG-350 kcmil (CU) cable only | 1 Phase | MLKC1A |
| | | | 3 Phase | MLKC3A |
| 400 | AL | (2) 1/0 - 250 kcmil or (1) #2 AWG-600 kcmil | 1 Phase | 4MLKA1A |
| | | | 3 Phase | 4MLKA3A |
| | CU | (1) 1/0 - 600 kcmil CU cable only | 1 Phase | 4MLKC1A |
| | | | 3 Phase | 4MLKC3A |
| 400 | AL | (1) AL 1/0-750 kcmil (2) AL/CU 250kcmil max. [max.(1) 600 kcmil CU wire] | 1 Phase | 4MLKA1B |
| | | | 3 Phase | 4MLKA3B |

① Revised P1 kits cannot be used with original P1.



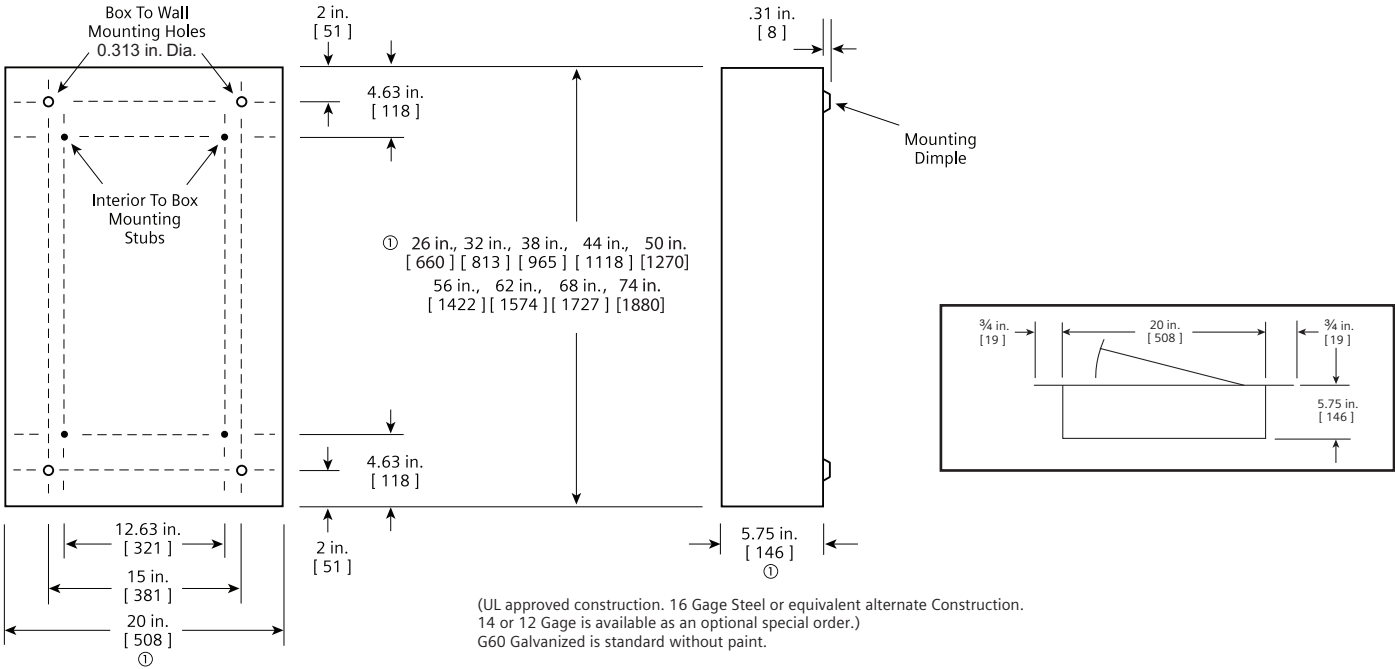
| Box Size | Surface A | Flush A | # of Hinges |
|----------|-----------|---------|-------------|
| 26 | 26 | 27.5 | 2 |
| 32 | 32 | 33.5 | 2 |
| 38 | 38 | 39.5 | 2 |
| 44 | 44 | 45.5 | 3 |
| 50 | 50 | 51.5 | 3 |



| Box Size | Surface A | Flush A | # of Hinges |
|----------|-----------|---------|-------------|
| 56 | 56 | 57.5 | 3 |
| 62 | 62 | 63.5 | 3 |
| 68 | 68 | 69.5 | 3 |
| 74 | 74 | 75.5 | 3 |

Type 1 Box

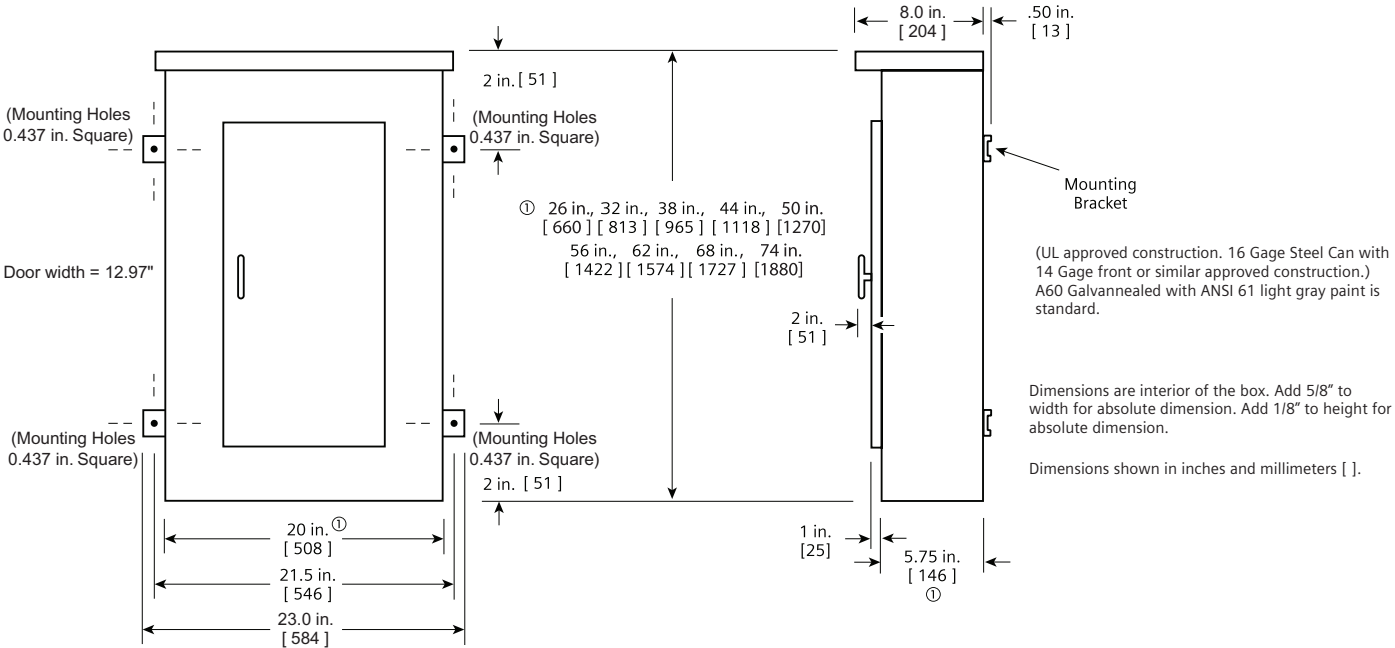
Box is symmetrical



Type 3R and 3R/12 Box

Note: 3R boxes 50" High and Larger include two "T" handles.

Flush Mounting



Legal Manufacturer

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